Abstract

[0036] Mesogens having the following general formula:

$$\chi - \langle P \rangle - C(O)O - \langle P \rangle - O(O)C - \langle P \rangle - \gamma$$

wherein

X and Y independently are selected from the group consisting of amino groups, polymerizable groups, and groups having the following general structure:

wherein Z is selected from the group consisting of terminal functionalities and polymerizable groups; provided that when X is a polymerizable group, Y is an amino group;

- R² is a bulky organic group having a bulk greater than R¹ and R³ whereby, when both X and Y are polymerizable groups, said bulk is adapted to provide sufficient steric hindrance to achieve a nematic state at room temperature while suppressing crystallinity at room temperature, thereby providing effective rheology and workability at room temperature; and
- 15 R¹ and R³ are selected from groups less bulky than R² adapted to maintain said nematic state.